Monnit Industrial
Wireless Seat Occupancy Sensor

General Description

Monnit's industrial wireless seat occupancy sensor monitors for force or weight applied to a sensor plate.

Features

- 3 ft. leaded wires.
- Detects force applied to the sensor plate.
- Free iMonnit basic online wireless sensor monitoring and notification system to configure sensors, view data and set alerts via SMS text and email.

Principle of Operation

The Monnit industrial wireless seat occupancy sensor uses a stress plate with an integrated flexible, stress sensitive ribbon to accurately measure when (force) is applied to the plate. Perfect for monitoring seats for occupancy. The data is stored in the online system and can be reviewed and exported as a data sheet or graph. User customization allows you to set the frequency of readings and the ability to set thresholds for notifications or alerts from the iMonnit online sensor monitoring system.

Solar Power Option

Monnit Industrial Sensors are powered by a replaceable 3.6 V battery (included).

An optional solar powered version is also available. The solar powered sensor uses a Lithium Iron Phosphate rechargeable battery in conjunction with a solar power cell, extending the life of the battery.

Monnit Industrial Sensor Electronics Specifications

- Power: replaceable 3.6V battery (included)
- Communication: RF 900, 920, 868 and 433 MHz
- Dimensions: 3.7" x 2.23" x 1.38"
- Antenna: 3dBi RP SMA antenna
- Operating Temperature: -40° to 85°C (-40° to 185°F)
- Transmission Range: 300 - 350 ft. non-line-of-sight*
- Battery Life: at 1 hour heartbeat setting, battery will last ~ 4-5 years.**

 * Actual range may vary depending on environment.
** Battery life is determined by sensor reporting frequency and other variables.

Industrial
Wireless
Sensor

2.316 in
(58.84 mm)

3.701 in
(94.0 mm)

Height:
1.378 in
(35.0 mm)
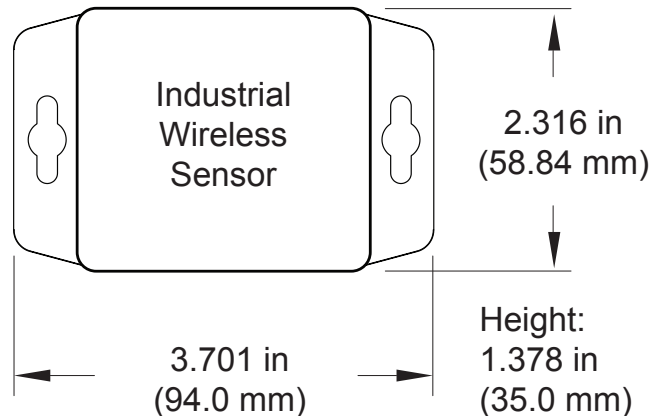
Applications

- Heavy Equipment Operator Seats
- Indoor / Outdoor Stadium Seat Monitoring
- General Seat Monitoring
- Inventory Management

The Leader in Low Cost Wireless Sensors

Technical Specifications

Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.7 µA (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode)
Operating Temperature Range (Board Circuitry and Battery)	-20°C to +60°C (-4°F to +140°F) **
Optimal Battery Temperature Range (Coin Cell)	+10°C to +50°C (+50°F to +122°F)
Base Resistance	100 Ω - 500 KΩ
Enclosure Rating	NEMA 1, 2, 4, 4x, 12 and 13 rated, sealed and weather proof
Certifications	FC CE ▮Industry Canada ⊜ 900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1. 920 MHz product; ARIB STD-T108 R210-103733. 868 and 433 MHz product tested and found to comply with: CISPR 22:2008-09 / EN 55022:2010 - Class B and ETSI EN 300 220-2 V2.4.1 (2012-05).

Seat Sensor Plate Specifications

Life Cycle	More than 1,000,000 Cycles (Tested to 10,000,000+ Cycles)
Temperature Range	-35°C to +85°C (-31°F to +185°F)
Hysteresis	7%

  * Hardware cannot withstand negative voltage. Please take care when connecting a power device.
 ** At temperatures above 100°C, it is possible for the board circuitry to lose programmed memory.

Type 1, 2, 4, 4X, 12 and 13 NEMA Rated Enclosure:

Monnit's Industrial sensors are enclosed in reliable, weatherproof NEMA rated enclosures. Our NEMA rated enclosures are constructed for both indoor or outdoor use and protect the sensor circuitry against the ingress of solid foreign objects like dust as well as the damaging effects of water (rain, sleet, snow, splashing water, and hose directed water).

- Safe from falling dirt.
- Protects against wind blown dust.
- Protects against rain, sleet, snow, splashing water, and hose directed water
- Increased level of corrosion resistance
- Will remain undamaged by ice formation on the enclosure

MONNIT®

For more information about our products or to place an order, please contact our sales department at 801-561-5555.

Visit us on the web at www.monnit.com.

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